

EPICS Base Releases and Plans, 2015 Edition

Andrew Johnson
AES-SSG, Argonne

Outline

- Recent Releases
 - Base 3.14.12.5
 - Base 3.15.2
- Future plans
 - Base 3.16
 - Base 4.x
- Help needed!
- One more thing...

Base R3.14.12.5

- Released on March 24th
- Incorporated all bug fixes from the 3.14.12 Known Problems page
- New features
 - dbLoadRecordsHook (back-ported from 3.15 branch)
 - asTrapWrite listeners can now see the client's put data
 - ai.ROFF and ao.ROFF fields are now DBF_ULONG
 - New CMD_xxx variables for builds, for use on command-line only
- Target-specific changes
 - New targets **win32-x86-static** and **windows-x64-static**
 - Support for Solaris 11 (untested)
 - Cross-build **win32-x86-mingw** on Linux hosts
 - RTEMS build rules for building GESYS modules
 - New **relPaths.sh** target for Cygwin IOCs, equivalent to Windows' **dllPath.bat**
- See Release Notes for full list and more detail



Base 3.15.2

- Released last week (May 14th)
 - Ralph Lange now manages releases on the 3.15 branch
- Incorporates all bug fixes and enhancements from
 - 3.14 branch up to Base 3.14.12.5
 - 3.15 branch — Known Problems plus other fixes
- Other changes
 - MSI now generates build dependency files (.d) so is no longer compatible with old version
 - A new variable MSI3_15 is now used by the build to locate MSI, must support -D option
 - Link field values in database files can be up to 255 characters long
 - Limit was 79 chars; in 3.16.x there will be no limit
 - Parallel builds work better on Windows (use GnuMake 4.x and 'make -j8' or similar)
 - More build warnings cleaned up

Base 3.16

- Aiming for a release in December
 - Michael Davidsaver (NSLS-2, BNL) is doing a lot of the development on this branch
- Current/pending features
 - Record link parsing refactored
 - Record scanning API enhancements
 - Lock-sets being rewritten to remove global lock
 - Many more self-tests of internal functionality
 - Variable length array support in local CA channels and pcas
 - epicsTime routines return a status value, not just ERROR
 - Other stuff that Michael hasn't posted/developed/described/thought of yet
 - Monotonic time?

Base 4.x

- Timescale TBD
 - Probably after 3.16 (i.e. next year)
- Merge some EPICS V4 C++ modules into Base
 - At least pvDataCPP, pvAccessCPP and pvaSrv
- Needs work in the IOC to support record links over pvAccess
 - Hope to make it possible to choose which server and client protocols are supported by each IOC

Help Needed!

- Does your site make local changes to EPICS Base?
 - (other than just configuring it before building)
- Is there additional functionality you would like EPICS Base to provide?
- We need developers!
 - Work on new features
 - Review other people's code
 - Triage, locate and fix bugs
 - Update and correct documentation
- Contact me <anj@aps.anl.gov> if interested



Janet Anderson is Retiring

- Approximately 48 years of service at Argonne
- EPICS Base
 - Developed and maintained the EPICS build system (telephone support)
 - Worked on C and Perl code throughout the tree
- APS Extensions
 - Motif and X11 application development and maintenance
 - ALH, StripTool, Probe, MEDM
 - These programs are now “essential maintenance only”
- APS Accelerator
 - Managed our extensions and IOC support module builds

